

**Listing of Claims:**

1. (Previously presented) A method of analyzing auction data, comprising:  
organizing, by a processor, previously acquired auction data into a plurality of sub-samples, each sub-sample comprising bid data associated with auctions having a common number of bidders, the number of bidders varying among the sub-samples;  
applying, by the processor, an inverse bid function to at least two sub-samples;  
pooling, by the processor, results from applying the inverse bid function to form a first pool;  
applying, by the processor, a direct bid function on the first pool to generate sample bids;  
matching, by the processor, bids from at least one sub-sample to the sample bids; and  
pooling, by the processor, results from the matching with the first pool to form a second pool.
2. (Original) The method of claim 1 wherein applying the inverse bid function comprises applying a function that is applicable to an independent private values ("IPV") auction.
3. (Original) The method of claim 1 wherein applying the direct bid function comprises applying a function that is applicable to an independent private values ("IPV") auction.
4. (Original) The method of claim 1 wherein organizing comprises forming a first group of large sub-samples and a second group of small sub-samples, the small sub-samples containing bid data associated with auctions that have fewer than a pre-specified total number of bid observations and the large sub-samples containing bid data associated with auctions that have more than a pre-specified total number of bid observations.

5. (Previously presented) A method, comprising:
  - organizing, by a processor, previously acquired auction data into a plurality of sub-samples, each sub-sample comprising bid data associated with auctions having a common number of bidders, a first sub-sample comprising bid data associated with auctions having more bidders than all other sub-samples;
  - applying, by the processor, an inverse bid function to the largest sub-sample to produce initial pseudo values;
  - applying, by the processor, a direct bid function to the initial pseudo values to calculate sample bids associated with a second sub-sample that is the next largest sub-sample, in terms of number of bidders, after the first sub-sample;
  - matching, by the processor, bid data contained in the second sub-sample with the sample bids to produce second pseudo values; and
  - combining, by the processor, the first and second pseudo values together to produce combined auction values.
6. (Original) The method of claim 5 further comprising applying the direct bid function to the combined auction values to calculate additional sample bids associated with a third sub-sample that is the next largest sub-sample after the second sub-sample, in terms of number of bidders.
7. (Original) The method of claim 6 further comprising matching the additional sample bids with the third sub-sample to produce third pseudo values and combining the third pseudo values into the combined auction values.
8. (Original) The method of claim 7 further comprising applying the direct bid function to calculate additional sample bids associated with additional sub-samples of decreasing size, in terms of the number of bidders, matching the sample bids to the additional sub-samples to produce additional pseudo values, combining the additional pseudo values into the combined auction values.

9. (Original) A system, comprising:  
a processor;  
memory containing an auction application that is executed by the processor and causes the processor to  
form a plurality of sub-samples from an auction data set, each sub-sample comprising bid data associated with auctions having a common number of bidders;  
apply an inverse bid function to at least two sub-samples;  
aggregate results from applying the inverse bid function to form a first pool;  
apply a direct bid function on the first pool to generate sample bids;  
match bids from at least one sub-sample to the sample bids; and  
aggregate results from the matching with the first pool to form a second pool.
10. (Original) The system of claim 9 wherein the inverse bid function comprises a function that is applicable to an independent private values ("IPV") auction.
11. (Original) The system of claim 9 wherein the direct bid function comprises a function that is applicable to an independent private values ("IPV") auction.
12. (Original) A system, comprising:  
a processor;  
an application executable by said processor and that causes the processor to  
organize previously acquired auction data into a plurality of sub-samples, each sub-sample comprising bid data associated with auctions having a common number of bidders;  
apply an inverse bid function to at least two sub-samples;

re-sample results from applying the inverse bid function to generate  
re-sampled data;  
apply a direct bid function on the sampled data to generate sample  
bids; and  
match bids from at least one sub-sample to the sample bids.

13. (Original) The system of claim 12 wherein the inverse and direct bid functions comprise functions that are applicable to an independent private values ("IPV") auction.

14. (Original) A computer readable storage medium storing instructions that when executed by a processor cause the processor to process auction data, said instructions comprising:

at least one instruction that organizes previously acquired auction data into  
a plurality of sub-samples, each sub-sample comprising bid data  
associated with auctions having a common number of bidders;  
at least one instruction that applies a first bid function to at least two sub-  
samples;  
at least one instruction that re-samples results from applying the first bid  
function to generate re-sampled data;  
at least one instruction that applies a second bid function on the sampled  
data to generate sample bids; and  
at least one instruction that matches bids from at least one sub-sample to  
the sample bids.

15. (Original) The storage medium of claim 14 wherein the first bid function comprises an inverse bid function.

16. (Original) The storage medium of claim 14 wherein the second function comprises a direct bid function.

17. (Original) A computer readable storage medium storing instructions that when executed by a processor cause the processor to process auction data, said instructions comprising:

- at least one instruction that forms previously acquired auction data into a plurality of sub-samples, each sub-sample comprising auction data associated with auctions having a common number of bidders, a first sub-sample comprising bid data associated with auctions having more bidders than all other sub-samples;

- at least one instruction that applies an inverse bid function to the largest sub-sample to produce initial pseudo values;

- at least one instruction that applies a direct bid function to the initial pseudo values to calculate sample bids associated with a second sub-sample that is the next largest sub-sample, in terms of number of bidders, after the first sub-sample;

- at least one instruction that matches bid data contained in the second sub-sample with the sample bids to produce second pseudo values; and

- at least one instruction that combines the first and second pseudo values together to produce combined auction values.

18. (Original) The storage medium of claim 17 further comprising an at least one instruction that applies the direct bid function to the combined auction values to calculate additional sample bids.

19. (Original) The storage medium of claim 17 further comprising matching the additional sample bids with a sub-sample to produce additional auction values.